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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,628	04/03/2001	Ran Oz	5079P006	3840

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EXAMINER	
JUNTIMA, NITTAYA	
ART UNIT	**PAPER NUMBER**
2663	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	09/825,628	OZ ET AL.	
	Examiner	Art Unit	
	Nittaya Juntima	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-73* is/are pending in the application.

4a) Of the above claim(s) *10,20,28,36,37 and 66* is/are withdrawn from consideration.

5)☒ Claim(s) *1-6,9,11-19,26,29,35, 38-65, and 67-73* is/are allowed.

6)☒ Claim(s) *7,21-25,27 and 30-34* is/are rejected.

7)☒ Claim(s) *8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 May 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 5/4/2005.

2. The objections to the oath/declaration, drawings, and claims are withdrawn in view of applicant's amendment.

3. Claims 10, 20, 28, 36-37, and 66 have been cancelled as per applicant's amendment.

4. Claims 1-6, 9, 11-19, 26, 29, 35, 38-73 are allowed.

5. Claims 21-25, 30-31, 33-34 are rejected under 35 U.S.C. 102(a).

6. Claims 7, 27, and 32 are rejected under 35 U.S.C. 103(a)

7. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 21-25, 30-31, and 33-34 are rejected under 35 U.S.C. 102(a) as being anticipated by an admitted prior art (Fig. 1).

Per claim 21, as shown in Fig. 1, the admitted prior teaches a method comprising the steps of:

Receiving, at a local distribution center (a headend 20-3), the sequence of media signals (a plurality of media signals in a selected digitized program contained in a primary combined signal), bandwidth information (the available bandwidth of the downstream channel) and bit rate conversion information (the results of the analysis must be received at the headend 20-3 after generated by an analyzer 20-3-2). See paragraph 13, ll 1-9 of the specification, see also paragraph 4, ll 1-4 and paragraph 8, ll 1-5.

Determining, by a local distribution center (controller 20-3-4 in the headend 20-3), whether to convert the bit rate of the sequence of media signals in view of bandwidth information and the bit rate conversion information (paragraph 13, ll 7-12).

(Processor 20-3-6) converting the bit rate of the sequence of media signals in response to the determination (paragraph 13, ll 12-16).

Per claim 22, since the admitted prior art teaches that the media signals are sequences of media signals (paragraph 4, ll 1-4) and that the sequences of media signals in the selected digitized program(s) are used in the generation of the information on the amount of actual bit rate conversion that can be achieved by applying bit rate conversion techniques (paragraph 4, ll 1-4, paragraph 8, ll 1-5, paragraph 13, ll 1-9), therefore, it is inherent that the media signals must comprise at least two sequences of media signals where each sequence of media signals must also be associated with a bit rate conversion information.

Per claims 23 and 30, the admitted prior art further teaches that each sequence of media signals comprises of compressed media signals (compressed media signals read on compressed video and audio in MPEG format, paragraph 3 and paragraph 4, ll 1-4) and is representative of at

Per claim 24, the admitted prior art discloses a step of selecting at least one of the at least two sequences (the selected digitized programs which contain sequences of media signals) to be provided to the channel (the downstream channel) and wherein converting the media signals in view of the selection (paragraph 11 and paragraph 13, see also paragraph 4, ll 1-4 and paragraph 8, ll 1-5).

Per claim 25, it is inherent that the step of receiving must be preceded by a step of multiplexing the at least two sequences of media signals since the headend 20-3 receives a signal primary combined signal (multiplexed sequences of media signals) which contains the selected digitized programs having sequences of media signals (paragraphs 10, 11, and 13).

Per claim 31, since paragraph 4, ll 4-8, teaches that some prior art conversion methods still produces a lower quality loss than the simple conversion of bit rate, therefore, it is inherent that the bit rate conversion information (the results of the analysis, paragraph 13, ll 3-12) must indicates a quality loss resulting from the appliance of the at least two bit rate conversion schemes.

Per claims 33 and 34, the admitted prior teaches that the media signals/media stream signals are selected from a group of MPEG compliant signals/transport packets (signal/transport packets that are compressed and transported according to MPEG specifications), compressed signals representative of audio and visual information (compressed video and audio signal in MPEG format), and sequences of media signals (sequences of media signals) (paragraph 3 and paragraph 4, ll 1-4).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 7 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over an admitted prior art (Fig. 1).

Per claims 7, as shown in Fig. 1, the admitted prior teaches a method for generating and transmitting bit rate conversion information, the method comprising:

(An analyzer 20-3-2) receiving a sequence of media signals/one media stream (a plurality of media signals in a selected digitized program contained in a primary combined signal), the sequence of media signals/one media stream is to be transmitted over a communication channel (a downstream channel connected to cable network 30). See paragraphs 10, 11, and 13 of the specification. See also paragraph 4, ll 1-4 and paragraph 8, ll 1-5.

(An analyzer 20-3-2) applying at least two bit rate conversion schemes/one bit rate conversion scheme (bit rate conversion techniques) on the sequence of media signals/one media stream (at least two bit rate conversion schemes must be applied, e.g. mathematically, on the plurality of media signals since the information on the amount of actual bit rate conversion that can be achieved by applying bit rate conversion techniques is generated, paragraph 13 of the specification).

(An analyzer 20-3-2) analyzing the results of the appliance of the at least two bit rate conversion schemes/one bit rate conversion scheme to provide bit rate conversion information (the results of the analysis) (the results of the analysis are provided to controller 20-k-4, i.e.

controller 20-3-4, as information regarding the amount of actual/predicted bit rate conversion, paragraph 13 of the specification).

The admitted prior fails to explicitly teach that the steps of applying and analyzing are repeated to produce bit rate conversion information indicative of results of an appliance of a sequence of bit rate conversion schemes on the sequence of media signals.

However, the admitted prior further discloses that there is a need to perform some bit rate conversion iterations in order to match a bit rate of at least one media stream to the available bandwidth of a channel (paragraph 5, ll 2-6) and that the results of the bit rate conversion analysis performed by the analyzer 20-3-2 are provided to the controller 20-3-4 (Fig. 1 and paragraph 13, ll 1-12). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of the prior art to include that the steps of applying and analyzing are repeated to produce bit rate conversion information indicative of results of an appliance of a sequence of bit rate conversion schemes on the sequence of media signals in order to produce bit rate conversion information which would assist the controller in determining as to which of the selected digitized programs to apply which bit rate conversion techniques.

Per claim 32, the admitted prior art fails to teach that the media signals are associated with priority criteria, and wherein the step of converting the media signals is further based upon a priority associated with the media signals.

However, it is well known in the art that there are different levels of quality associated with media signals, and these quality levels usually relate to different priority levels which need to be maintained by a network operator for customer satisfaction. Therefore, it would have been

obvious to one skilled in the art to include that the media signals are associated with priority criteria, and wherein the step of converting the media signals is further based upon a priority associated with the media signals in order to maintain different levels of media signal quality to ensure customer satisfaction.

12. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over an admitted prior art (Fig. 1) in view of Zhang et al. (USPN 6,181,711).

Per claim 27, the admitted prior fails to explicitly teach that the bit rate conversion schemes are selected from a group as disclosed in the claims. However, Zhang et al. teach that the bit rate conversion schemes can be selected from a group of removing filler packets (removing of filler packets), removing filler frames (removing of filler frames), removing stuffing bits (removing stuffing bits) (col. 9, ll 29-59).

Therefore, it would have been obvious to one skilled in the art to include that the bit rate conversion schemes are selected from the group of Zhang et al. into the teaching of the admitted prior as suggested by the admitted prior art (paragraph 4, ll 8-9).

Response to Arguments

13. Applicant's arguments filed 5/4/2005 have been fully considered but they are not persuasive.

A. In the remarks regarding amended claim 7, the applicant argued that claim 7 depends on the amended claim 1 and, therefor, should be allowed because the admitted prior art does not teach that the bit rate conversion information is transmitted to multiple controllers that determine whether to apply bit rate conversion schemes.

In response, please note that amended claim 7 is now an independent claim that includes the limitations of the previous claim 1 which are taught by the admitted prior art (see rejection of claim 7 in section 11). It is noted that the features upon which applicant relies (i.e., the bit rate conversion information is transmitted to multiple controllers that determine whether to apply bit rate conversion schemes) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the rejection is sustained.

B. In the remarks regarding amended claim 21, the applicant argued that the admitted prior art does not teach that the local distribution center receives the bit rate conversion information and does not generate this information.

In response, the admitted prior art clearly teaches that a local distribution center (a headend 20-3) receives bit rate conversion information (the results of the analysis must be received at the headend 20-3 after generated by an analyzer 20-3-2 which resides in the headend 20-3). See paragraph 13, ll 1-9 of the specification, see also paragraph 4, ll 1-4 and paragraph 8, ll 1-5. It is noted that the features upon which applicant relies (i.e., the local distribution center does not generate the bit rate conversion information) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the rejection is sustained.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima
July 25, 2005

RICKY NGO
PRIMARY EXAMINER

7/25/05